

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 November 2004 (04.11.2004)

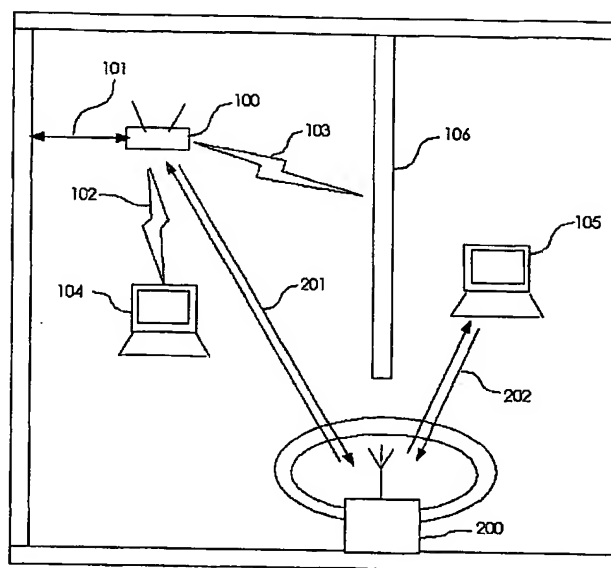
PCT

(10) International Publication Number
WO 2004/095763 A2

- (51) International Patent Classification⁷: **H04L**
- (21) International Application Number:
PCT/US2004/007708
- (22) International Filing Date: 6 April 2004 (06.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/460,571 7 April 2003 (07.04.2003) US
- (71) Applicant (for all designated States except US): **WIDEFI, INC.** [US/US]; 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **PROCTOR, James, A., Jr.** [US/US]; WiDeFi, Inc., 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US). **GAINEY, Kenneth, M.** [US/US]; WiDeFi, Inc., 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US).
- (74) Agents: **POSZ, David, G. et al.**; Posz & Bethards, PLC, 11250 Roger Bacon Drive, Suite 10, Reston, VA 20190 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TRANSMISSION CANCELLER FOR WIRELESS LOCAL AREA NETWORK



(57) Abstract: A frequency translating repeater (200) for use in a wireless local area network includes a cancellation unit. Canceller (402) is controlled by control (401) to provide an injection signal for canceling leakage in a receive signal path. Reference coupler (403) provides a reference signal from the transmit signal, injection coupler (404) injects a correction signal, and sample coupler (405) provides a sample for feedback. A processor (510) receives the sample signal through a detector (415). Although the present invention is intended for a frequency translating repeater, it has broad applications in radio transceivers in general. One specific application is with frequency division duplex (FDD) handsets or base stations utilizing CDMA technologies such as W-CDMA and IS-2000 or 1XEV-DV/DO.



Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.